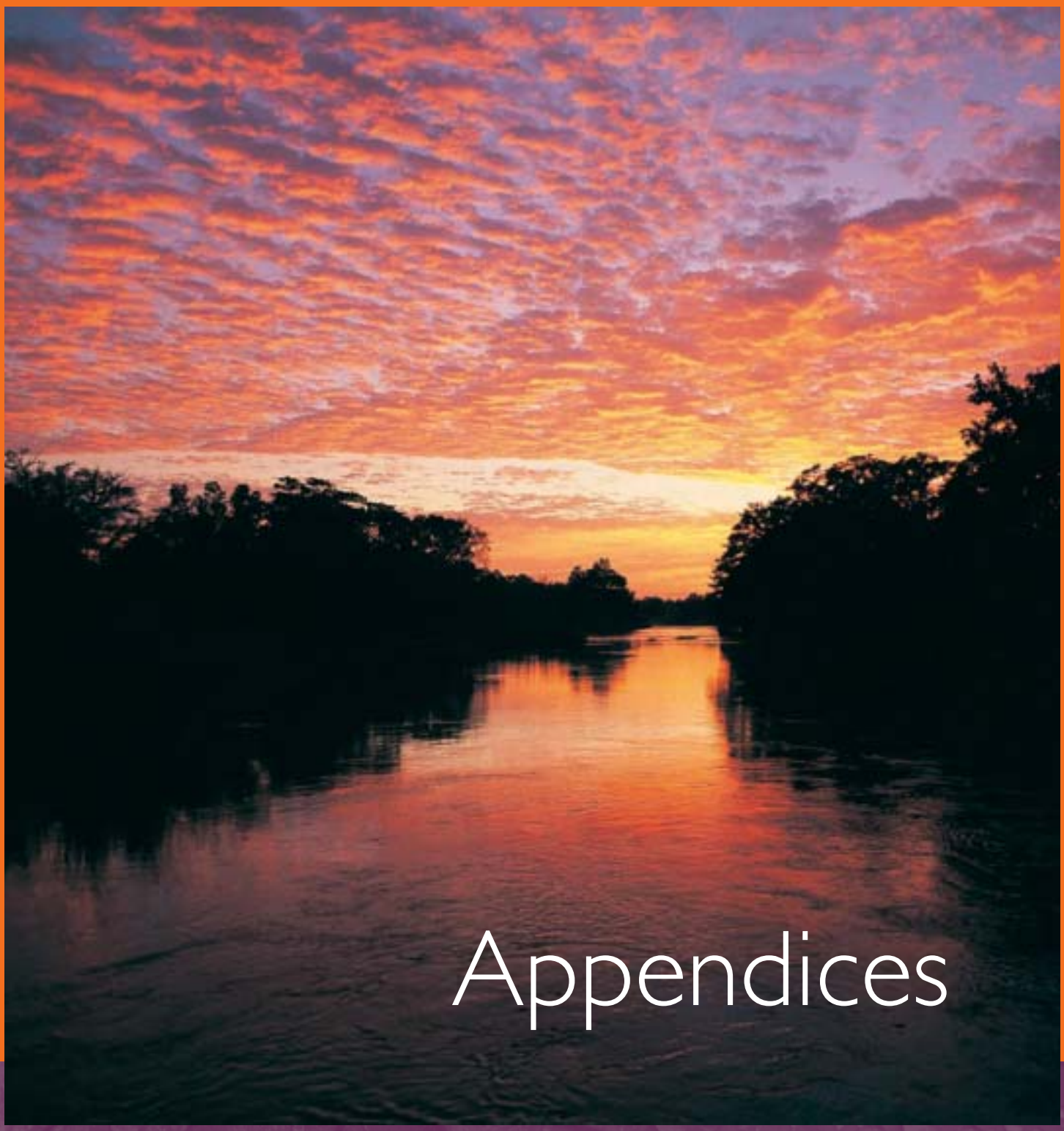

Appendices

CONTENTS

Appendix A Program Evaluations Completed in FY 2003

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
Goal 1, Objective 1 *Environmental Protection: Federal Planning Requirements for Transportation and Air Quality Protection Could Potentially Be More Efficient and Better Linked* This report determined: how many areas with air quality problems have failed to demonstrate conformity, why, what corrective actions they have taken, and what issues transportation planners have had with the conformity process, and what solutions are possible.	GAO found that: —Since 1997, 56 of the 159 transportation planning areas with air quality problems have failed to demonstrate conformity by a required deadline at least once, but only 5 had to change their transportation plans as a result. —About half of the areas failed because of resource, administrative, or technical problems, such as a lack of time and staff, and resolved the problem in 6 months or less. —About 1/3 of transportation planners surveyed anticipate having trouble demonstrating conformity in the future, especially in meeting limits on ozone and fine particulate matter resulting from vehicle emissions. A majority of transportation planners who had trouble demonstrating conformity or who failed to do so by a deadline said that the required frequency of demonstrations robs them of time and resources to solve other issues, such as growing congestion.	EPA agrees with GAOs recommendation that the current 3-year transportation plan and conformity update requirements need to be extended. The Administration has submitted a proposal for the reauthorization of the Transportation Equity Act for the 21st Century (TEA-21) that includes provisions to extend the transportation plan update and conformity frequency requirements to 5 years. GAO also recommends that EPA, in coordination with DOT, comprehensively assess the advantages and disadvantages of requiring regular updates of State Implementation Plans' (SIPs') motor vehicle emissions budgets. EPA believes that the states have the statutory flexibility they need to decide whether new data or models justify the costs of updating SIPs. Given the amount of federal, state and local resources that a SIP revision can require, EPA has always supported the flexibility provided by the current Clean Air Act on this matter.	General Accounting Office GAO-03-581 April 28, 2003 Available at: http://www.gao.gov/cgi-bin/getrpt?GAO-03-581
Goal 1, Objectives 3 & 4 *International Environment: U.S. Actions to Fulfill Its Commitments Under Five Key Agreements*	GAO found that: —The U.S. is generally taking actions to meet its commitments under the five specified agreements. —Federal agencies established domestic programs, reported	With regard to climate change, EPA continues to implement voluntary programs to reduce emissions of greenhouse gases cost-effectively. EPA's programs are expected to make a substantial contribution to the Bush Administration's goal of	General Accounting Office GAO-03-249 January 29, 2003

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
This report examined U.S. actions to fulfill its commitments under five international agreements; however only two of these agreements addressed Goal 1: —Montreal Protocol on Substances That Deplete the Ozone Layer. —United Nations Framework Convention on Climate Change. The report also examined the means used to track these actions and the results of others' evaluations of these actions for the selected agreements.	periodically on progress, and provided funding to other nations. —The U.S. committed to stop producing and importing certain substances that deplete the Earth's ozone layer by 1996 and did so. —The U.S. did not make a treaty commitment to reduce greenhouse gas emissions, the President set a goal in 1993 to reduce emissions to their 1990 level by 2000 and the U.S. spends over $1 billion a year to do so. However, U.S. emissions in 2001 exceeded the 1990 target level by about 12%. —The U.S. provided less assistance to other countries than it pledged relating to two agreements: the shortfall was 25% for the fund that finances climate change and other environmental projects, and 6% for ozone depletion.	improving the intensity of greenhouse gas emissions by 18% by 2012 (measured in terms of greenhouse gas emissions per unit of GDP relative to the emissions per unit of GDP in 2002). —EPA is actively implementing the five agreements, including the Montreal Protocol and the UN Framework Convention on Climate Change. —Under the Montreal Protocol, the U.S. has successfully met the phaseout deadlines for ozone-depleting chemicals. —EPA's achievements under these voluntary climate programs are extensively documented in the 3rd U.S. National Communication and in EPA annual reports. —EPA conducts ongoing analyses of its voluntary programs to evaluate their efficacy. —EPA and the Department of State are working to ensure that the United States makes its full contribution to the Montreal Protocol.	Available at: http://www.gao.gov/cgi-bin/getrpt?GAO-03-249
Goal 1, Objective 3 *Climate Change: Information on Three Air Pollutants' Climate Effects and Emissions Trends* This report examined: —The extent of agreement among scientists regarding the climatological effects of three air pollutants – black carbon (soot), ground-level ozone, and sulfate aerosols. —Seven countries' (four economically	GAO reported: —Scientists generally agree that sulfate aerosols have a cooling effect on climate, while ozone in the lower atmosphere has a warming effect. —Black carbon tends to warm the atmosphere but cool the Earth's surface. —Sulfate aerosols also affect how much and where it rains. —Considerable uncertainty remains about the size of these effects. —All seven countries are taking steps to reduce the amounts of the three pollutants. —The four economically developed countries have	—EPA has an ongoing program to monitor changes in ozone, particulate matter, and sulfur dioxides and to assess the global impact of such gases, particles, and related aerosols. —Monitoring shows that long-term trends in ambient air quality have been downward in the U.S. for the criteria pollutants. —EPA has begun assessing the role that black carbon and organic carbon play in climate change. —EPA is assessing the current state of knowledge on science, inventory, mitigation, and modeling for black carbon and organic carbon.	General Accounting Office GAO-03-25 April 28, 2003 Available at: http://www.gao.gov/cgi-bin/getrpt?GAO-03-25

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
developed and three developing countries) efforts to control these pollutants. —Trends in these substances in these seven countries over the past two decades, and estimates for the next decade. —The relationship between economic growth and environmental pollution.	well-established efforts underway. —The amounts of the three substances generally declined over the last two decades and are expected to decline over the next decade. GAO also noted that the results of research examining the possible connection between economic development and environmental pollution are inconclusive.	—EPA is reviewing current capabilities to quantify emissions of black carbon in the U.S., and potential mitigation options in key sectors, including how such measures affect co-emitted gases (PM, CO_2, sulfate aerosols). —EPA is planning to meet with key scientists and researchers to better understand the evolving atmospheric science, and to improve its our ability to inventory and model black carbon for both air quality and climate change issues.	
Goal 1, Objective 1 *Aviation and the Environment: Strategic Framework Needed to Address Challenges Posed by Aircraft Emissions* This report reviewed efforts in the United States and other countries to reduce emissions at airports, and the effects of improvements in aircraft and engine design on emissions.	GAO reported: —Many airports have taken measures to reduce emissions, such as converting airport ground vehicles from diesel or gasoline to cleaner alternative fuels. —Some measures (such as shifting to cleaner alternative fuels) have the potential to significantly reduce emissions, such as nitrogen oxides. —Other countries use many of the same measures as the U.S. to reduce emissions at airports. —Although federal government and the aircraft industry R&D have improved fuel efficiency and reduced many emissions from aircraft, including hydrocarbons and carbon monoxide, they have increased emissions of nitrogen oxides. As a result, many new aircraft are emitting more nitrogen oxides than the older aircraft they are replacing: new aircraft engines average over 40 percent more nitrogen oxides during landings and takeoffs than the engines used on older models.	—Since 1998 EPA and the Federal Aviation Administration have jointly chaired a national stakeholder initiative whose goal is to develop a voluntary program to reduce pollutants from aircraft and other aviation sources that contribute to local and regional air pollution. The major stakeholders participating in this initiative include representatives of the aviation industry (airlines and engine manufacturers), airports, state and local air pollution control officials and environmental organizations. If this initiative is successful, an agreement will be reached among all the stakeholders on a national voluntary aviation emissions reduction program. —EPA also plans to establish more stringent aircraft engine NO_x standards. EPA will participate in the next meeting of the International Civil Aviation Organization to establish more stringent international consensus emission standards, which is scheduled for February 2004. Such standards will likely be a central consideration in a future EPA regulation of aircraft engine emissions.	General Accounting Office GAO-03-252 February 28, 2003 Available at: http://www.gao.gov/cgi-bin/getrpt?GAO-03-252

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
Goal 1, Objective 1 *A Breath of Fresh Air: Reviving the New Source Review Program* This report examined: —The evolution of EPA's New Source Review (NSR) and Prevention of Significant Deterioration (PSD) regulations; guidance, and interpretation of those regulations; as well as the implementation of the regulatory programs. —The respective roles of the states and EPA in implementing the NSR and PSD programs. —The evolution of EPA's policies and strategies for enforcing the programs. —The impacts of current program administration on industrial competitiveness, capital investment, technological innovation, pollution prevention, and environmental quality.	NAPA found that: —NSR is a critical tool for protecting public health and improving the nation's air quality. —The complicated NSR program has been effective in controlling air pollution from newly built industrial facilities and utilities, but it has performed poorly in reducing pollution from the nation's oldest and dirtiest factories and power plants. —The program is unfair to facilities that have invested in upgrading their equipment to reduce pollution, while others have avoided controlling their pollution. —NSR's unpredictable and lengthy permitting process is detrimental to facilities that must change operations quickly to compete effectively. —NSR is not having the positive effect on the health of individuals, or on the quality of the nation's air, that Congress intended.	—The NAPA report made seven recommendations for improving NSR, five of which were recommendations for Congress to improve NSR through legislative changes. —EPA continues to vigorously enforce the NSR program, as recommended by the NAPA report. —NAPA recommended that EPA establish clear requirements for compliance. EPA has been actively engaged in a more than 10-year effort to improve the NSR rules. Part of the goal of this effort has been to provide more certainty about when and how NSR applies. —EPA recently finalized a set of reforms that will provide more certainty to industry and will remove barriers to, and create incentives for, environmentally beneficial projects. —Earlier this year, EPA promulgated a rule addressing routine maintenance.	National Academy of Public Administration April 2003 Available at: http://209.183.198.6/NAPA/NAPAPubs.nsf
Goal 1, Objective 1 *Managing Carbon Monoxide Pollution in Meteorological and Topographical Problem Areas* This report addressed episodes of high CO	NAS found that: —Some areas are especially vulnerable to violations of the 8-hour NAAQS for CO because of a number of factors, including differences in the topography and temporal variability of local	—EPA is working with its state and local partners to address their individual needs. For example, EPA has helped Alaska, to implement unique local measures (installing electrical outlets for engine block heaters) to control CO emissions.	National Academy of Sciences ISBN: 0-309-08923-9 2003 Available at: http://www.nap.edu/books/0309089239/html/index.html

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
concentrations in meteorological and topographical problem areas, and the potential approaches to predicting, assessing, and managing them. The report focused on: —Types of emission sources and operating conditions that contribute most to episodes of high ambient CO. —Scientific bases of current and potential additional approaches for developing and implementing plans to manage CO air quality, including the possibility of new catalyst technology, alternative fuels, and cold-start technology. —Control of stationary source contributions to CO air quality.	meteorology and emissions rates. —In patients diagnosed with coronary artery disease, CO alone has been shown to exacerbate exercise-induced chest pain (angina) in controlled laboratory experiments. —To reach attainment, communities vulnerable to exceeding the health-based NAAQS for CO can implement various local measures to complement federal vehicle emissions standards. —Federal new-vehicle emissions standards have been effective in reducing CO emissions, including emissions from vehicles operated in cold climates. —A relatively small number of high-emitting vehicles contribute disproportionately to CO and other motor-vehicle emissions. —Oxygenated fuels program benefits are declining in effectiveness as more modern vehicles enter the fleet. —Although ambient CO concentrations have dropped considerably throughout the country, the number of monitors is inadequate to characterize CO distribution and identify all locations of high CO concentrations.	—Separating the effects of CO from its co-pollutants and assessing the relationship of CO to other pollutants has been done to some extent in the epidemiology studies cited and reviewed in the *2000 CO Criteria Document*. Recently, the Health Effects Institute has conducted some toxicology research on automobile and diesel exhaust mixtures, focusing mainly on co-pollutants. —EPA will consider the testing and analysis recommendations as it designs programs to test the in-use performance of motor vehicles and will evaluate Tier 2 vehicles for CO as well as other emissions. (More information on Tier 2 appears in the Goal 1 narrative). —EPA is developing a new modeling system called MOVES and will incorporate any new data into this model. As EPA develops the model, it will bear in mind NAS's recommendation to assess both the manufacturer's sales strategy to meet NO_x limits and associated trading and banking provisions. The new model is designed to better support fine scale modeling and improve the characterization of emissions from certain vehicles and off-road sources of CO. —EPA supports allowing state and local agencies to relocate CO monitors to where they provide more measurable value for air program management and protection of public health. —Under the Transportation Conformity Act, areas that are undertaking major highway projects that affect vehicular traffic and congestion perform	

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
		CO air quality modeling. Also, some areas perform local scale CO air quality modeling for highway projects under the National Environmental Policy Act. Some urban areas have performed area wide CO modeling with the Urban Airshed Model in the past for CO attainment demonstrations. This modeling contributes to estimation of the spatial distribution of CO for certain episodes.	
Goal 2, Objective 1 *The Drinking Water State Revolving Fund Program: Financing America's Drinking Water from the Source to the Tap—A Report to Congress* This was a report updating Congress on the progress of the Drinking Water State Revolving Fund (DWSRF) program from its beginning in 1997 through June 2001, as required by the Safe Drinking Water Act (SDWA).	EPA reported: —States provided public water systems with approximately 1,800 loans totaling $3.8 billion (72% of available funds). —States far exceeded the SDWA requirement to provide a minimum of 15% of their available funding to small systems by providing 75% or 1,330, of actual loan agreements, to small systems, totaling $1.5 billion. —States have received 87% of federal grants available to them and have initiated construction on projects for 89% of the executed loan agreements. —For every $1 in funds drawn from the federal government, states have disbursed $1.60 for project construction. —Both the program offices and the drinking water industry face present and future implementation challenges.	EPA discussed the following for congressional consideration: —Permanently extend the authority to transfer funds between the DWSRF and Clean Water SRF programs. The SDWA provision sunset on September 30, 2001.	U.S. Environmental Protection Agency EPA 918-R-03-009 May 2003 Available at: http://www.epa.gov/safewater/dwsrf.html
Goal 2, Objective 1 *Deep Injection Wells: EPA Needs to Involve Communities Earlier and Ensure That Financial Assurance Requirements Are Adequate*	GAO reported: —The opportunities EPA provides for public comment on proposed Class I deep injection wells come late in the process, after a draft permit has been prepared. GAO recommended that EPA	—EPA believes it provides for ample public involvement. GAO recognizes this, in a sample chronology of events for construction of deep-injection wells included in Appendix I of its report. Under the SDWA, the Agency	General Accounting Office GAO-03-761 June 2003 Available at: http://www.gao.gov/cgi-bin/getrpt?GAO-03-761

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
EPA and the states grant permits to operators of commercial hazardous Class I deep-injection wells to construct and operate these wells, and must obtain public comments on the permits. Communities often raise concerns about the safety of these wells and other matters. The objectives of the investigation were to: —Address these community concerns. —Consider environmental justice issues. —Ensure that financial assurances for Class I commercial hazardous injection wells fully protect the taxpayer if bankruptcy occurs.	involve the public earlier. —EPA addresses environmental justice issues in two basic ways: (1) as part of its process for deciding whether to issue a permit for well construction, and (2) in response to specific civil rights complaints filed with the Agency after permits are issued. GAO did not make any recommendations to the Agency regarding environmental justice. —Current financial assurance requirements may not ensure that adequate resources are available to close a commercial deep injection well in the event of a bankruptcy or ceased operations. GAO recommended that EPA review and, if warranted, strengthen financial assurance requirements for this sub-well type.	follows the regulatory requirements for public participation at 40 CFR Part 124 (Procedures for Decision Making) and the underground injection control regulations at 40 CFR Parts 144 and 146 for specific permitting authority. The Agency disagrees with GAO's finding on financial assurance for the following reasons: —The finding is inconsistent with the long history of the success of financial assurance provisions for Class I wells. Since 1980, the EPA has had no problems with any company on financial assurance. —While Class I well financial assurance regulations are based on RCRA regulations, they are not linked to those regulations in any other way.	
Goal 2, Objective 2 *Water Quality: Improved EPA Guidance and Support Can Help States Develop Standards That Better Target Cleanup Efforts* GAO examined the extent to which: —States are changing designated uses when necessary. —EPA is assisting states toward that end.	GAO reported that EPA needs to: —Provide additional guidance regarding use changes and follow through on plans to assess the feasibility of establishing a clearinghouse of approved use changes. —Set a time frame for developing and publishing nationally recommended sedimentation criteria. —Develop alternative, scientifically defensible monitoring strategies that states can use to determine if water bodies are meeting	EPA is beginning to implement all of GAO's recommendations, many of which are included in the Water Quality Standards and Criteria Strategy being finalized. The Final Strategy is available at: http://epa.gov/waterscience/standards/strategy/.	General Accounting Office GAO-03-881T June 19, 2003 Available at: http://www.gao.gov

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
—EPA is updating the "criteria documents" states use to develop the pollutant limits needed to measure whether designated uses are being attained. —EPA is assisting states in establishing criteria that can be compared with reasonably obtainable monitoring data.	their water quality criteria. —Develop guidance and a training strategy that will help EPA regional staff determine the scientific defensibility of proposed criteria modifications.		
Goal 2, Objective 2 *Evaluation of State and Regional Water Quality Monitoring Councils* This report: —Evaluates the effectiveness of the regional Water Quality Monitoring Councils in achieving EPA's objectives. —Identified possible ways that may help current councils and facilitate the operation and establishment of additional councils. —Examined council successes and barriers to success. —Identified best practices. —Presented recommendations for effectively obtaining the data necessary for	The report found: —The councils yield substantial benefits to water monitoring programs by unifying the efforts of disparate agencies. —The councils vary in design and objectives. —Effective councils have state support and dedicated a staff is invaluable. —Councils have difficulty keeping momentum, and can benefit from EPA support.	EPA remains interested in creating state and regional water quality monitoring councils and supporting them in its monitoring program initiatives.	The report is available at www.epa.gov/owow/monitoring.

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
critical Agency decision-making. The oldest state and regional Water Quality Monitoring Councils (there are about a dozen of them) have been operating for over a decade; this report evaluates their effectiveness in achieving EPA objectives, and identifies possible lessons that may help current Councils and facilitate the operation and establishment of additional Councils. Additionally, this report discusses Council successes and barriers to success; identifies best practices; and develops recommendations for effectively obtaining the data necessary for critical Agency decision making.			
Goal 2, Objective 3 *Livestock Agriculture: Increased EPA Oversight Will Improve Environmental Program for Concentrated Animal Feeding Operations* The purpose was to: —Identify the key shortcomings of the Concentrated Animal Feeding Operations (CAFO) program. —Assess the potential challenges	GAO recommend that the EPA: —Develop and implement a comprehensive tactical plan that identifies how the Agency will carry out its increased oversight responsibilities under the revised program. Specifically, this plan should address what steps the Agency will take to ensure that authorized states are properly permitting and inspecting CAFOs and are taking appropriate enforcement actions. The plan should also identify what, if any, additional resources will be needed to carry out the plan	—The Office of Water (OW) has produced a CAFO implementation plan for states and EPA regions to achieve 100% permit coverage by 2006. The plan was distributed to the regions on May 30, 2003. OW is tracking regional progress. —OW asked Regions for resource needs, and is providing them with assistance and contractor support as necessary. —The regions are reporting to OW their targets for state implementation of both state regulatory changes and permitting, and EPA	Government Accounting Office (GAO) GAO-03-285 January 2003 Available at: http://www.gao.gov/cgi-bin/getrpt?GAO-03-285

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
the states and EPA may face when implementing revisions to the CAFO regulations; —Determine the extent of the U.S. Department of Agriculture's involvement in developing the proposed revisions to EPA's regulations.	and how EPA will obtain these resources. —Work with authorized states to develop and implement their own plans that identify how they intend to carry out their increased permitting inspection, and enforcement responsibilities within specified time frames. These plans should also address what, if any, additional resources states will need to properly implement the program and how they will obtain these resources.	headquarters is tracking progress	Government Accounting Office (GAO) GAO-03-285 January 2003 Available at: http://www.gao.gov/cgi-bin/getrpt?GAO-03-285
Goal 3, Objective 3 *Community Involvement Survey, Valleycrest Superfund Site* The purpose was to provide Superfund staff at Valleycrest site feedback on how community members perceive their community involvement. EPA headquarters conducts community involvement surveys for the regions if requested. EPA completed one survey in FY 2003, and two in FY 2002.	The report found that: —87% of the respondents prefer getting information about the cleanup directly from EPA. Only 59% say they have received information directly from EPA. —57% are satisfied with opportunities for involvement. —61% are satisfied with how EPA explains it decisions. —47% are satisfied with how EPA uses the community input. —69% are satisfied with the courtesy of EPA staff. Public meetings and a community advisory committee are the two most preferred ways for community members to give their input.	The regional community involvement staff will use the report's information to guide future involvement efforts at the site.	U.S. Environmental Protection Agency March 2003 The survey report will be shared with Valleycrest community members and placed in the local information repository for the site [Main Library, Dayton, Ohio]. A copy of the report can be obtained from Bruce Engelbert, OSWER/OSRTI (tel.: 703-603-8711)
Goal 3, Objective 3 *Contaminated Sediments Technical Advisory Group (CSTAG)* The purpose of the evaluation was to help Remedial Project Managers appropriately investigate and manage	Common findings among sites include the need for: —Additional characterization of potential sources, including ground water, and the relative contribution of flood plain soils and in-water sediment to risk. —Additional characterization of background, including anthropogenic contaminants from	Common regional responses include agreement to: —Incorporate additional characterization and monitoring into site management plans. —Increase communication with other EPA and state regulatory programs, tribes, and trustee agencies. —Expand analysis of the relative	The CSTAG has submitted recommendations on the Housatonic River, (Pittsfield, MA), Kalamazoo River (MI), Ashland/Northern States Power Lakefront (Ashland, WI) and Montrose/Palos Verdes Shelf

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
their sites in accordance with the II risk management objectives established in OSWER Directive 9285.6-08, *Principles for Managing Contaminated Sediments Risks at Hazardous Waste Sites.*	outside the site. —Additional consideration of potential recontamination in site management. —Additional site-specific evaluation of the physical stability of sediment, which also considers proposed future uses of the water body. —Additional evaluation of a wider array of technologies. —Development of more site-specific remedial action objectives. —Suggestions to minimize the adverse impacts of remedy implementation on the public and biota. —Additional peer review of models. —Additional coordination across regulatory programs that relate to surface water.	contributions of various sources, including land-based sources, groundwater, flood plains, and in-water sediment. —Increase consideration of source control prior to sediment actions. —Increase evaluation of *in-situ* risk management approaches. —Share lessons learned with other site managers. —Increased consideration of pilot testing or phased implementation of work.	(San Pedro, CA) sites and is drafting recommendations on the Portland Harbor (OR) sites. The recommendation and the region's responses are posted on EPA's contaminated sediments web page at: http://www.epa.gov/superfund/resources/sediment/cstag.htm
Goal 3, Objective 3 *Pre-SARA sites: Analysis of Why Construction Is Not Yet Complete at Certain Sites* The purpose was to: —Analyze pre-SARA sites (sites placed on the National Priorities List prior to the enactment of the Superfund Amendments and Reauthorization Action) whose construction is not yet construction complete. —Identify trends and characteristics that might explain why these sites have remained in earlier	The analysis found that: —Pre-SARA "non construction complete" (NCC) sites are generally larger and more complex than the pre-SARA "construction complete" (CC) sites. —Pre-SARA NCC sites are more likely to have issues associated with contamination of groundwater, sediments, and ecological resources, and less likely to be contaminated with pesticides, dioxins, and "other inorganics." —Pre-SARA NCC sites are less likely to have waste management as the primary industrial activity. —In many pre-SARA NCC cases, the community has become more involved in selecting and implementing the remedy. While such active community involvement will	In FY 2003, OSRTI began its Pre-SARA First Generation Initiative to encourage EPA regions to work with states, other federal agencies, and local jurisdictions to identify obstacles to site completion (e.g., site access, cleanup standards, technology, funding) and formulate strategies necessary to move all the pre-SARA sites into the construction completion category. The draft report, issued in June 2003, is the first step in this initiative, and will help interested parties better understand why some sites have taken longer than others in the remedial pipeline.	U.S. Environmental Protection Agency June 2003 The Executive Summary to the June 2003 Draft Report may be obtained from William Ross, OSWER/OSRTI (tel.: 703-603-8798)

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
stages of the remediation. —Point the way to further research or new policy initiatives.	likely result in a better remedy, it may have contributed to delaying the remedy's completion.		
Goal 3, Objective 3 *Evaluation of the Performance of the Corps of Engineers in Support of EPA's Superfund Program* The purpose was to formally evaluate how well the Corps of Engineers programs at the district office level support the Superfund programs in EPA regional offices.	The evaluation found that: —In general, the Corps does a good job in assisting EPA to manage the SF program; essentially all the EPA Regions are pleased with at least some of the functions the Corps performs. —At least three regions cited the following areas of concern: the adequacy and/or timeliness of monthly reporting; sensitivity to cost control; the quality and/or timeliness of payment processing; and the efficiency of funds management, especially as related to recovery of unneeded funds on project completion. —The regional offices that have had the best experience with the Corps have invested heavily in communication, coordination, training, and oversight of the Corps' activities.	The final report was issued in August 2003 and copies of the report were sent to EPA regions soon thereafter. EPA management has met with top Corps management to discuss the report's findings and appropriate followup.	U.S. Environmental Protection Agency August 2003 Copies of the Report may be obtained from Ken Skahn, OSWER/OSRTI (tel.: 703-603-8801)

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
Goal 4, Objective 3 *Great Lakes: An Overall Strategy and Indicators for Measuring Progress Are Needed to Better Achieve Restoration Goals* The report: —Addressed the extent of progress made in restoring the Great Lakes Basin. —Identified federal and state environmental programs in the basin and their funding. —Evaluated restoration strategies and their coordination. —Assessed overall environmental progress made in restoration.	GAO found many federal and state programs fund restoration activities in the Great Lakes basin. Different funding strategies, lack of coordination, and limited funding impede restoration efforts. GAO recommended that EPA: —Ensure that the Great Lakes National Program Office (GLNPO) fulfills its coordination responsibilities and develops an overarching Great Lakes Strategy. —Develop environmental indicators and a monitoring system for the Great Lakes basin that can be used to measure overall restoration progress.	EPA generally agrees that better planning, coordination, monitoring, and the development of indicators are needed and will undertake these improvements. EPA is organizing its efforts and will continue to work with the U.S. Policy Committee and the Binational Executive Committee to address concerns in the GAO report.	General Accounting Office GAO-03-515 April 2003 Available at: http://www.gao.gov
Goal 4, Objective 3 *Status of Restoration Activities in Great Lakes Areas of Concern: A Special Report* This report informs the public about progress toward restoring beneficial uses in areas of concern (AOCs) and to presents recommendations for achieving further progress.	The Commission found that: —Although a significant level of effort toward the Remedial Action Plan implementation has been observed in the Great Lakes AOCs, much more work remains to be done. —Challenges to implement Remedial Action Plans include securing resources, identifying accountability and responsibility, defining restoration targets, setting priorities, and monitoring recovery. The Commission recommended: —Increasing documentation, reporting, and accountability. —Ensuring that monitoring and related systems are in place. —Defining AOC boundaries and identifying sources of degradation.	EPA generally agrees with the recommendations, which are consistent with planned actions under the *Great Lakes Strategy 2002*. However, there are institutional and resource limitations to immediate implementation of all recommendations.	International Joint Commission April, 2003 Available at: http://www.ijc.org

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
Goal 4, Objective 3 *State of the Great Lakes 2003* This report fulfills the reporting requirements of the Great Lakes Water Quality Agreement to assess the Great Lakes ecosystem, provide assessments on 43 of approximately 80 indicators, and identify management challenges for achieving results.	This report found that: —The status of the chemical, physical, and biological integrity of the Great Lakes basin ecosystem is mixed, based on lake by lake and basin-wide assessments of the 43 indicators. —Because only a portion of the full suite of indicators was used, a challenge is to work cooperatively toward monitoring, assessing, and reporting on all indicators. Management challenges include: —Identifying land use decisions that will sustain the ecosystem over the long term, thereby contributing to improved water and land quality. —Determining how essential habitats can be protected and restored to preserve the species and the unique and globally significant character of the Great Lakes ecosystem. —Determining what actions will be needed to respond to potential climate change impacts. —Determining how to address the economic and practical issues of continued removal of toxic contamination from the ecosystem.	Through the State of the Lakes Ecosystem process, EPA will participate in a two-part review of the Great Lakes indicators. The first part will consider the process for selecting and reviewing the indicators. The second part will be a management review of the indicators and their effectiveness in influencing management decisions, including monitoring programs.	Environment Canada and U.S. Environmental Protection Agency ISBN 0-662-34798-6 EPA 905-R-03-004 Cat. NO. En40-11/35-2003E August 2003 Available at: http://www.epa.gov/glnpo/
Goal 4, Objective 5 *The Measure of STAR: Review of the U.S. Environmental Protection Agency's Science to Achieve Results (STAR) Research Grants Program* This report assessed: —The scientific merit of EPA's STAR program.	The National Research Council reported that: —EPA's competitive research grants program has yielded significant new findings and knowledge critical for EPA's decision-making process. —The program has provided EPA with independent analysis and perspective that has improved the agency's scientific foundation.	The Agency has no planned response.	National Research Council of the National Academies 2003 Available at: http://www.nap.edu/catalog/10701.html?onpi_news-doc05122003

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
—Its demonstrated or potential impact on EPA's policies and decisions. —Other program benefits that are relevant to EPA's mission.	—By attracting young researchers, this program has also expanded the nation's environmental science infrastructure. —The STAR Fellowship program, which funds research by students pursuing advanced degrees in environmental sciences, should continue.		
Goal 5 *Evaluation of the Environmental Partnership between the NPS Intermountain Region and the EPA Region 8* The purpose of the evaluation was to: —Determine which components of the EPA-National Park Service (NPS) partnership have provided the most and the least value to the parks. —Identify which aspects of implementing environmental projects were most challenging. —Assess the degree of operational behavioral and management changes resulting from the partnership. —Determine the partnership's effectiveness in meeting its goals. —Identify lessons learned and offer guidance to other agencies interested	The evaluation recommended that the EPA-NPS partnership: —Develop a comprehensive communication strategy that addresses its different audiences. —Clarify the role of each partner and identify projects focused on pollution prevention (P2) and compliance assistance. —Seek broader institutional support within each agency. —Develop a performance measure as it works with NPS Environmental Management System (EMS). —Develop an evaluation to allow for on-going assessment.	—As new projects develop, the partnership will implement a formal communication plan. —The NPS and EPA are looking at ways to formalize their respective roles. —EPA is seeking broader support of this partnership model through the Resource Conservation Challenge initiative. —The NPS has not requested any additional assistance from EPA on its EMS development. EPA will include performance measurement as it works with other partners. —At this time, the NPS and EPA have not addressed ongoing assessment. As EPA enters into future partnerships, it will incorporate this recommendation.	Industrial Economics, Inc. The report is being promoted by the Office of the Chief Financial Officer (OCFO) and the EPA Region 8 P2 Team. It will be presented at a National Partnership Conference and at an evaluation conference in November 2004. The report is available on the EPA Intranet and may be posted on the EPA Internet site.

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
in partnering with EPA. —Assess whether this partnership has improved the NPS's environmental commitment and performance. —Determine whether providing environmental services to federal agencies involve duplication of efforts. —Develop a model that can be used to evaluate other partnership efforts.			
Goal 5, Objective 1 *NPDES Majors Program Performance Analysis* The purpose was to provide senior managers of the enforcement and compliance assurance program with a tool for managing the National Pollutant Discharge Elimination System's (NPDES) majors program and improve EPA's ability to focus resources on the areas where the potential for environmental impact is greatest.	The report found: —Significant noncompliance (SNC) rates have effectively remained steady since 1994. —Recidivism rates are improving slightly but exceedances of permit limits remain high. —Due to shifts to wet weather areas, EPA enforcement at NPDES majors has declined but state enforcement has increased. —The EPA regions do not believe that majors are significant contributors to water impairment but little data exist. —States are not currently required to enter penalty data into PCS which limits the Agency's ability to draw conclusions about the effect of penalties on compliance and deterrence. The scarce penalty data available suggest that escalation of performance actions and penalties may not be escalating. —Federal facilities have had higher SNC rates.	EPA will: —Focus limited resources and significant non-compliers who pose the greatest risks. —Further study pollutant loadings from majors to determine their contribution to water impairment. —Accelerate the schedule for states to submit penalty data to EPA. —Revisit enforcement response policy (EMS) to emphasize escalation and examine the definition SNC to capture facilities with the most potential for environmental degradation. —Consult with Federal Facilities Enforcement concerning SNC rates.	U.S. Environmental Protection Agency This report is internal and not publicly available.

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
Goal 5, Objective 2 *Evaluation of Implementation Experiences with Innovative Air Permits: Results of the U.S. EPA Flexible Permit Implementation Review* The purpose was to evaluate EPA's and companies' implementation experiences with innovative flexible air permits.	The evaluation found that: —The flexible permits facilitated and encouraged emissions reductions and pollution prevention. Companies with flexible permits significantly reduced actual plant-wide emissions and/or emissions per unit of production. Provisions allowing advanced approval for certain changes reduced administrative costs. —The flexible permits worked as intended, assuring appropriate environmental protection under all applicable requirements. The monitoring, recordkeeping, and reporting approaches established in the permits were sufficient to ensure compliance. Most of the flexible permits provided equivalent or more information to the public when compared to conventional permits. —In most cases, the flexible permits enabled the companies to respond to new market opportunities and save several hundred hours in staff time needed to prepare individual permit applications. State and local permitting authorities saved staff time associated with processing case-by-case permit applications.	The report's findings are being used: —To inform the New Source Review Improvement Rulemaking (the final evaluation report was included as part of the official docket and was used in confirming that the plant-wide applicability limits PALs emissions caps are workable). —To inform an internal dialogue about the development of the Agency's Pollution Prevention in Permitting Program (P4) policy. —As guidance for how the Agency should operate and improve existing and future flexible permitting pilots. —As a teaching tool for permitting authorities about flexible permits.	U.S. Environmental Protection Agency Office of Air and Radiation, and Office of Policy, Economics and Innovation Available at: http://www.epa.gov/ttncaaa1/t5/meta/m24005.html Also available by request through the Evaluation Support Division http://www.epa.gov/evaluate/feedback.htm
Goal 5, Objective 2 *Evaluation of the Performance Track Program in Region 1* The purpose was to: —Assess the progress of participating members toward meeting their commitments. —Develop a communication	The report found that: —EPA New England Performance Track members have demonstrated environmental gains in the first year of reporting. Aggregate results show large actual reductions in the amount of solid and hazardous waste handled, water and energy used, and volatile organic compounds and other gases emitted into the air.	The program will use the evaluation's results to develop more concrete, outcome-based, environmental performance measures. EPA New England is exploring the development of a Communication of Results Plan.	U.S. Environmental Protection Agency EPA New England (Region 1) The report will be available on the Evaluation Support Division website in the future. http://www.epa.gov/evaluate

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
model to illustrate participants' success. —Provide recommendations for improving the program.	—Program members value EPA their membership. —The program would benefit from better communication of results and enhanced incentives. It should develop a communications strategy that includes tailoring the communication of results to specific audiences.		
Goal 5, Objective 2 *Evaluation of EPA New England's Colleges and University Initiative* The purpose was to: —Determine if the 52 colleges and universities surveyed are implementing preferred environmental practices as a result of this initiative. —Identify the factors that motivate or discourage participation in the program. —Consider the approach's applicability to other EPA regions or sectors of the regulated community.	The evaluation found that: —Program incentives encouraged participation. —Participants addressed violations identified in self audits. —Participants are implementing long-term environmental management changes; including self-audits. —Participants find EPA's outreach tools useful. —Many schools are implementing or considering an environmental management system (EMS) because of the initiative. However, most schools are in an early stage of development and/or implementation of their EMSs and were not yet able to identify specific benefits yielded by them.	EPA New England is considering recommendations for: —Modifying outreach tools. —Improving follow-up and recognition for better performance. —Developing clearer performance goals and baseline data.	Industrial Economics, Inc. Available at: http://www.epa.gov/newengland/assistance/univ/eval-cui.html Also available by request through the Evaluation Support Division http://www.epa.gov/evaluate/feedback.htm
Goal 5, Objective 2 *An Evaluation of a Regional Clean Air Incentives Market (RECLAIM): Lessons in Environmental Markets & Innovation* The purpose was to investigate causes of increases in	The evaluation found that: —Market-based programs require significant planning, preparation, and management during their development and throughout their lives. —Market information is a key factor affecting facility decision-making. The report recommended that:	The evaluation identified key design features of the RECLAIM program that, if designed differently, might have addressed the unexpected increase in the price of RECLAIM emission credits. Office of Air and Radiation (OAR) staff are using the lessons learned from the evaluation as they monitor existing programs and consider	U.S. Environmental Protection Agency EPA Region 9 http://www.epa.gov/region09/air/reclaim/index.html Also available by request through the Evaluation Support Division

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
RECLAIM trading credit prices and the program's effectiveness.	—Regulators should strive to create confidence and trust in the market by making a full commitment to the program and ensuring consistency in the market and their policies. —Because unforeseen external circumstances (like energy deregulation) can have dramatic impacts on market-based programs. Therefore, these programs must be designed to react quickly and effectively to such external factors. —Periodic evaluation, revisiting of program design assumptions, and contingency strategies are crucial to keeping programs on track. RECLAIM's experience suggests that a market-based approach can work with the Clean Air Act's New Source Review program. This may be a function of the types of sources included in the review program or the controls in place at many facilities. Regulators need to have a strong understanding of the regulated facilities and the factors affecting their decision-making.	the development of similar emissions trading programs.	http://www.epa.gov/evaluate/feedback.htm
Goal 5, Objective 2 *State Innovation Grant Program: First-Round Observations and Recommendations* The purpose was to: —Review the Grant Program's procedural mechanics. —Compare its first round performance to its stated objectives. —Highlight how ways in which EPA can improve the program.	The report found that: —Overall the states and EPA regions are pleased with the grant program, the administration of its first round, and the commitment that it shows to innovation. —The program generated proposals that supplement planned or existing state/EPA innovation partnerships. —The program did not engender "new, bigger, bolder" projects primarily because of the limited time and money available for proposal development, the amount of money available, and limited collaboration	EPA plans to enhance its consultation with states and with EPA regions, and program offices on future priority and focus areas. Opportunities for consultation and collaboration may include existing forums, such as EPA's Innovation Action Council and the Environmental Council of the States and may also be found through more case-by-case, ad-hoc interactions with individual states.	U.S. Environmental Protection Agency EPA's Office of Policy, Economics, and Innovation Available by request through the Evaluation Support Division http://www.epa.gov/evaluate/feedback.htm

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
	between states and EPA on proposal development. —The Grant Program could face increasing difficulty engendering "new, bigger, bolder" innovations and strengthening state/EPA partnerships if EPA and state priorities are not well aligned in the future.		
Supporting Program Offices *Grants Management Reviews* In FY 2001, the area of "Improved Management of Assistance Agreements" was designated an Agency weakness. And in FY 2003, the Office of Grants and Debarment is implementing a comprehensive approach to grants management reviews of EPA offices.	The reviews found that although EPA headquarters and regional offices have made progress in improving grants management, several areas need improvement, including: —Technical reviews of grant applications. —Cost reviews. —Documentation of grants competitions. —Development of environmental outcomes in grant work plans, and more comprehensive advanced monitoring reports.	OGD has asked each office, subject to a review, to submit a corrective action plan within 90 days of the issuance of the final Grant Management review report. OGD will follow-up on these corrective action plans to ensure that all weaknesses are corrected. The Agency is planning to conduct three types of grants management reviews of EPA offices: Comprehensive Grants Management Reviews performed by OGD; Grants Management Self-Assessments performed by program offices based on OGD guidance; and Grants Performance Measure Reviews performed by OGD, which involve statistical reports from the Agency's grant databases. These reviews will be performed over a three-year cycle, with the exception of performance measure reviews, which will be conducted every year.	U.S. Environmental Protection Agency Office of Grants and Debarment Three grants managements reviews were completed in FY 2003. Information about these reports can be obtained by contacting Richard Kuhlman, Director, Grants Administration Division (tel.: 202-564-0696)
Supporting Program Offices *Evaluation of EPA Intern Program (EIP)* The evaluation asked the following questions: —Is the EIP meeting its the identified goals and objectives?	The evaluation found that: —The EIP has done a commendable job of meeting its identified goals to recruit and nurture diverse, high potential employees to become the next generation of EPA leaders. —EIP participants are more highly educated and ethnically diverse than Presidential Management Interns, other	The Agency plans to: —Share the evaluation results with program stakeholders and Agency managers for additional feedback on selected topics. —Convene a program guidance workgroup. —Work with Agency disability coordinators to improve access for interns with disabilities.	Industrial Economics, Inc. EPA posted the results of this program evaluation on its Intranet site which is available to Agency Stakeholders. EPA sent its results to the Office of Personnel Management in

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
—What is the level of satisfaction among participants? —Are there lessons learned or recommendations for improving the program?	recent outstanding scholars and other new hires to the Agency's workforce. —EIP also hires more people with disabilities and veterans than other comparable, entry-level programs. —Managers generally believe interns are better qualified than other new hires. —The rate of EIP resignations is much lower than that of employees in similar career programs. —Interns would overwhelmingly recommend the program to a friend or peer. Areas identified for improvement included the need for additional program guidance on policies and procedures, more support for interns with disabilities, and improved outreach for minority applicants.	—Coordinate with national recruiting efforts to improve outreach to minority and disabled students.	conjunction with EPA's Human Capital Initiative. EPA also expects to send its results to other federal agencies for benchmarking.
Supporting Program Offices *Review of EPA's Clean Water and Drinking Water State Revolving Funds, with annual payments totaling $2.1 billion* EPA annual payments to state Revolving Funds total $2.1 billion. The purpose of this evaluation was to review the processes and controls over fund disbursements and to determine whether any erroneous payments had occurred.	The review found that: —Controls were effective and based on audits and performance evaluation reviews. —Only isolated instances of erroneous payments have occurred in the two State Revolving Funds. For the Clean Water State Revolving Fund, the erroneous payment rate was 0.13%; for the Drinking Water State Revolving Fund, the rate was 0.04%.	—Actions to correct erroneous payments have been completed, or are underway. —Recommendations were aimed toward ensuring that erroneous payments are properly monitored and the erroneous payment rate remains low. —The Office of Water includes reviews for erroneous payments as part of its annual onsite reviews. It tracks any erroneous payments found and communicates this information to the Office of the Chief Financial Officer.	U.S. Environmental Protection Agency Office of the Chief Financial Officer October 2002 Information about this review may be obtained by contacting Joe Nemaragut (tel.: 919-541-3777)

Evaluation Title and Scope	Findings of the Evaluation	Planned Response	Public Access
Supporting Program Offices *EPA Contract Payments* EPA makes approximately $1 billion in contract payments annually. The purpose of this evaluation was to determine if any erroneous contract payments had occurred and to monitor the effectiveness of EPA's controls in preventing such errors.	The evaluation found minimal erroneous payments. —From January 2003, reports show that EPA's rate of proper contract payments has remained consistent at well over 99% each month, for both numbers of payments made and dollar amounts disbursed. —For the period January—July 2003, 99.88% of payments (and dollars disbursed) were found to be proper.	The Agency will continue monitoring the status of contract payments to ensure that erroneous payments remain low. EPA is also considering engaging the services of a recovery auditor to identify and recover erroneous payments.	U.S. Environmental Protection Agency Office of the Chief Financial Officer Information about this review may be obtained by contacting Milton Brown (tel.: 202-564-0373)